

U.S. Patent Application Serial No. 10/047,992  
Response to Office Action dated September 26, 2006

**REMARKS**

Claims 1, 7, 8, 11, 17, 18 and 51-56 are pending in this application, of which claims 1, 11 and 51-56 have been amended. Claims 2-6, 9-10, 12-16 and 19-50 have been canceled. No new claims have been added.

Claims 1 and 11 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

Accordingly, claims 1, 11 and 51-56 have been amended to correct the noted instances of indefiniteness.

Thus, the 35 U.S.C. § 112, second paragraph, rejection should be withdrawn.

The Examiner has maintained from the previous Office Action all of the 35 U.S.C. § 103(a) rejections based on different combinations of Sterett et al., Kudoh et al., Tseng et al., Orme-Marmerelis et al., JP ‘803, Pan and JP ‘937.

A telephonic interview was conducted with the Examiner on December 4, 2006, and it was emphasized that the Examiner has not addressed the specific limitations contained in steps (a)-(d) enumerated on pages 9-10 of Applicants' response filed July 10, 2006, which are recited in both claims 1 and claim 11.

The Examiner indicated that if a response were to be filed containing such an argument, along with the comments specifically regarding step (d) presented in the interview, he would “revisit” or reconsider those rejections.

Accordingly, as discussed in Applicants' previous response filed July 10, 2006 and as argued in that response, none of these references discloses the following steps and features recited in claims 1 and 11:

- (a) a data is associated with a reference coordinate system provided in the machine,  
and the data includes coordinates of points for determining arrangement of the electric circuit, a distance between any two of the points adjacent each other, and a cross-sectional area of the electric circuit extended between the two points;
- (b) the step of converting the data to a second set of data associated with the reference coordinate system provided in a construction member and the step of depositing the molten metal on a surface of the construction member to form the electric circuit on the construction member based on the second set of data;
- (c) the deposited metal grains can overlap one another such that the electric circuit has the cross-sectional area stored in the second set of data between the two points;
- (d) the molten metal is jetted from a nozzle an the nozzle has X, Y, Z axes perpendicular to each other, the nozzle moving along each of the X, Y, Z axes, the nozzle moving along in a circumferential direction around each of the X axis and the Y axis.

For instance, step (d) describes with particularity that the nozzle moves “along in a circumferential direction around each of the X axis and the Y axis.” This specific feature is not taught, mentioned or suggested in any of these cited references.

For example, column 5, line 61 to column 6, line 15 of Sterrett et al. discloses no more than that “the droplet forming means 12 can be moved in the X, Y and Z directions,” but there is no disclosure of how it is moved, as required in “feature (d)” recited in claims 1 and 11 of the

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instant application.

Thus, the 35 U.S.C. § 103(a) rejections should be withdrawn.

In view of the aforementioned amendments and accompanying remarks, claims 1, 7, 8, 11, 17, 18 and 51-56, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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